**Unit 10 Review - Rates of Change**

**Multiple Choice**

*Identify the choice that best completes the statement or answers the question.*

**The rate of change is constant in each table. Find the rate of change. Explain what the rate of change means for the situation.**

 1)

|  |  |
| --- | --- |
| Time (days) | Cost ($) |
| 3 | 75 |
| 4 | 100 |
| 5 | 125 |
| 6 | 150 |

|  |  |
| --- | --- |
| A. |  dollars per day; the cost is $25 for each day. |
| B. |  dollars per day; the cost is $25 for each day. |
| C. |  dollars per day; the cost is $75 for each day. |
| D. |  dollars per day; the costs $1 for 150 days |

 2)

|  |  |
| --- | --- |
| Time (hours) | Distance (miles) |
| 4 | 260 |
| 6 | 390 |
| 8 | 520 |
| 10 | 650 |

|  |  |
| --- | --- |
| A. | 10; Your car travels for 10 hours. |
| B. | 260; Your car travels 260 miles. |
| C. | ; Your car travels 65 miles every 1 hour. |
| D. | ; Your car travels 65 miles every 1 hour. |

**Find the slope of the line and show your method.**

 3) 

Slope =\_\_\_\_\_\_\_\_\_\_\_\_

 4) 

Slope =\_\_\_\_\_\_\_\_\_\_\_\_

 5) 

 Slope =\_\_\_\_\_\_\_\_\_\_\_\_

 6) 

Slope =\_\_\_\_\_\_\_\_\_\_\_\_

 7) 

Slope =\_\_\_\_\_\_\_\_\_\_\_\_

**Unit 7 Quiz - Rates of Change**

**Answer Section**

**MULTIPLE CHOICE**

 1) ANS: A PTS: 1 DIF: L2 REF: 6-1 Rate of Change and Slope

OBJ: 6-1.1 Finding Rates of Change

NAT: NAEP 2005 M1 | NAEP 2005 A2a | NAEP 2005 A2b | ADP J.4.1 | ADP K.10.1

TOP: 6-1 Example 1 KEY: rate of change

 2) ANS: C PTS: 1 DIF: L2 REF: 6-1 Rate of Change and Slope

OBJ: 6-1.1 Finding Rates of Change

NAT: NAEP 2005 M1 | NAEP 2005 A2a | NAEP 2005 A2b | ADP J.4.1 | ADP K.10.1

TOP: 6-1 Example 1 KEY: rate of change

 3) ANS: A PTS: 1 DIF: L2 REF: 6-1 Rate of Change and Slope

OBJ: 6-1.2 Finding Slope

NAT: NAEP 2005 M1 | NAEP 2005 A2a | NAEP 2005 A2b | ADP J.4.1 | ADP K.10.1

TOP: 6-1 Example 3 KEY: graphing | finding slope using a graph | slope

 4) ANS: D PTS: 1 DIF: L2 REF: 6-1 Rate of Change and Slope

OBJ: 6-1.2 Finding Slope

NAT: NAEP 2005 M1 | NAEP 2005 A2a | NAEP 2005 A2b | ADP J.4.1 | ADP K.10.1

TOP: 6-1 Example 3 KEY: finding slope using a graph | slope | graphing

 5) ANS: A PTS: 1 DIF: L2 REF: 8-3 Slope and y-intercept

OBJ: 8-3.1 Finding the Slope of a Line NAT: NAEP 2005 A4d

TOP: 8-3 Example 1 KEY: slope

 6) ANS: B PTS: 1 DIF: L2 REF: 6-1 Rate of Change and Slope

OBJ: 6-1.2 Finding Slope

NAT: NAEP 2005 M1 | NAEP 2005 A2a | NAEP 2005 A2b | ADP J.4.1 | ADP K.10.1

TOP: 6-1 Example 5 KEY: slope | horizontal and vertical lines | undefined slope

 7) ANS: B PTS: 1 DIF: L2 REF: 6-1 Rate of Change and Slope

OBJ: 6-1.2 Finding Slope

NAT: NAEP 2005 M1 | NAEP 2005 A2a | NAEP 2005 A2b | ADP J.4.1 | ADP K.10.1

TOP: 6-1 Example 5 KEY: horizontal and vertical lines | slope | undefined slope